RATES AND COMPETITION

IN THE

N.W.T. HIGHWAY TRANSPORT INDUSTRY

October 31, 1979

Prepared for the
COMMISSIONER OF THE
NORTHWEST TERRITORIES

by the

HIGHWAY TRANSPORT BOARD

N.W.T. Highway Transport Board

SUMMARY:

In most segments of the N.W.T. trucking industry there is competition in both rates and service. Within the LTL general freight segment of the industry,the rates are essentially uniform with only minor, insignificant variations between the five participating companies. This seeming lack of price competition is a natural result of oligopoly. Oligopoly,in turn,is the major form of industrial organization in the western economies. The Board could find no evidence to support the conclusions that lower prices would have resulted if the oligopoly had been based on price leadership rather than the existing cartel arrangement through the auspices of the Western Tariff Bureau.

The Board, though, did determine that modifications to the Territorial regulatory environment could be beneficial to the consumers, the two principal changes being that the companies be allowed to vary the posted rates downward on their own accord,and the other change being that applications for rate increases should be accompanied by justification as provided for by the Board. The Board further recommends that the documents used to justify higher rates should be public documents subject at all times to public review.

In both segments of the N.W.T. trucking industry there is competition in both rates and service. Within the L.T.L. general freight segment of the industry, the rates are essentially uniform with only minor, insignificant variations between the five participating companies. This apparent lack of price competition is a natural result of oligopoly. Although, in fact, [illegible] the major goal of industrial organization in the western economies. The Board could find no evidence to support the conclusions that lower prices would have resulted if the oligopoly had been based on price leadership rather than the existing cartel arrangement through the auspices of the Western Traffic Bureau.

Nevertheless, though, the Board recommends that modifications to the regulatory framework could be introduced to the companies, the principal changes being that the companies be allowed to vary the posted rates downward [illegible] and the other change being that applications for rate increases should be accompanied by justification as provided for by the Board. The Board further recommends that the information used to justify higher rates should be made a matter of record and at all times be open to public review.

INTRODUCTION:

Prior to analysing competiton and rates in the N.W.T trucking industry, it is necessary to establish a theoretical background against which we can view the industry and pinpoint any critical areas.

In terms of economic theory there are two polar mechanisms for establishing prices, perfect competition and monopoly. In perfect competition there are presumed to be numerous firms all alike and all servicing small insignificant portions of the market. Price is determined from the production costs of the firms and the demand conditions of the market place. Other than a fair return on investment and managerial skills no"profits" are made. On the other hand,monopoly is a situation where the firm controls the production and the sale of a good. This firm, taking into account its production costs and the market demand curve, sets a price whereby its profits are maximized. Unlike the perfect competitor the monopolist can extract a "profit" over and above a fair return on capital and managerial skills. This "profit" is generally regarded in a negative light as it only results from the firm's ability to control the market.

Somewhere between these two polar conditions lives reality. Generally, in a realistic situation the industry would be characterized by several firms all of which are big enough to influence the industrial capacity and that each firm can have a marked effect on the price charged for the commodities. Generally speaking, each firm recognizes its interdependence and whether explicitly or implicitly some form of pricing mechanism will develop. This type of competition is called oligopoly. Although economic theory is rich in explanations of perfect competition and monopoly, in the area of oligopoly there is veritable poverty. A few generalizations can be made with regard to oligopolists:

1) prices tend to be "sticky" and move about infrequently.
2) price movements are generally industry wide.
3) some form of "profit" over and above a fair return can be expected.
4) any form of competition will generally be for services.

Two distinct forms of pricing are present in oligopoly, an implicit and explicit method. The implicit method is called price leadership. In this method, one firm will put forward a new price structure and then watch the industry's response. If the industry follows its example, the price leader leaves his prices as posted. If the industry does not follow, then the price leader out of necessity must withdraw his increased prices and return to the lower prices charged by the industry.

In the other type of price setting, the various companies form a cartel to meet and agree on a specific price for the product they supply. As with the implicit method certain controls operate. The lower-cost company sees it to his advantage to keep the price low and will resist price increases, as in this manner they may be able to drive some of its competitors out of business. Additionally, if the price is too high the incentive to cheat will also be greater and threaten the stability of the cartel. In addition, too high a price would encourage other companies to enter the industry.

In most cartels there is generally some arrangement to segment the market and to prevent cheating. In the case of the trucking industry, the "Tariff Bureaus" are the mechanisms used to set rates and supposedly bind members to these rates.

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In another type of price setting, the various companies form a cartel to meet and agree on a specific price for the product they supply. As with the implicit method certain controls operate. The low-cost producer finds it to his advantage to keep the price low and still realize profits for himself, as in this manner they may be able to drive some of the competitors out of business. Conversely, if the price is too high the incentive to cheat will also be greater and threaten the stability of the cartel. In addition, too high a price would encourage other companies to enter the industry.

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particularly in the N.W.T. where the main competition for motor transport is air transport. The motor freight rates enter into the prices of every consumer good in the Southern Mackenzie area and they can and do effect the economic well-being of industry and the community. In the most general sense the basic activity of the tariff bureau relates to the following functions:

1) the formulation, production and distribution of tariffs.

2) a means whereby carrier can discuss and develop rate structures.

3) provides interlining agreements between its members.

4) provides rate and interline information to the shipping public.

Within the territorial context there is one tariff bureau with two segments, namely the Western Transportation Association and the Western Tariff Bureau. The W.T.A. publishes its interprovincial rates through the offices of the Western Tariff Bureau (W.T.B.). Canadian Freightways and Tri-Line are both members of this organization. Their overall impact in the N.W.T. is insignificant. The Western Tariff Bureau on the other hand has as members, Northwest Transport, Byers Transport, Grimshaw Trucking, Tri-Line and Hay River Truck Lines Ltd.

The W.T.B. is a privately owned organization and has been operating in its present form for 18 years. The W.T.B. hold regular member meetings at which rates are set. These rates are then published by the Bureau and currently the W.T.B. has 100 subscribers. It publishes 15 tariffs. The W.T.B. provides little in the way of analytical service. Meetings to establish rates are called by the staff members of W.T.B. Should the members of the tariff group turn down another member's rate suggestions, the proposing member has the option of "independent action", that is setting his own tariff.

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The W.T.B. is a non-profit making organization and has been operating in its present form for 40 years. The W.T.B. holds regular member meetings at which rates are set. These rates are then published by the Bureau and currently the W.T.B. has 400 subscribers. In addition, it [illegible]. The W.T.B. does [illegible] little in the way of statistical analysis, [illegible] on [illegible] the [illegible] of W.T.B. Should any members of the tariff group [illegible] other member's rate [illegible], the remaining member has the option of "independent action", that is setting his own tariff.

The Territorial legislation controlling the trucking industry limits the goods that any one carrier can move and the area he can move those goods in. To determine if there is a significant amount of competition within the trucking industry as a whole it is necessary to examine the operating authorities issued by the Board.

For commodity category "C" which is construction material, there are seventy-seven (77) companies that can move this material; of the seventy-seven, forty-one (41) can move the type of goods in from Edmonton. For household goods movers there are twenty-seven people entitled to move these goods, all but four can run into Alberta. For iron, steel and pipe and goods of a similar nature the Board has authorized 76 carriers to move this type of good and of these, fifty-one (51) can move goods from Alberta into the southern Mackenzie area. Similarly, for mobile homes, prefabricated packages and similar goods, there are in excess of 70 valid operating authorities and well over half permit the movement of goods from Alberta to the N.W.T. A similar situation exists for "P" petroleum products and chemicals in drums and bags. For the movement of bulk tank products such as fuel oil there are forty-one (41) operating authorities with over half permitting movement from Edmonton to the N.W.T. For "V" which is vehicles, machinery and equipment, seventy-nine (79) operating authorities are in existence and over forty-one are for extra-territorial traffic.

All the above described commodities are most frequently moved in truckload lots, by relatively large companies who are familiar with the trucking industry and who have enough information at their hands to ensure themselves of the best possible rates.

One segment of the trucking industry deals predominately in less-than-truckload-lots (LTL). The Board to date has issued thirty-six operating authorities for the movement of General Merchandise. Of these, only seven-

teen (17) can legally move LTL from Alberta into the southern Mackenzie Valley area. Of that seventeen, eight do not have a complimentary Alberta operating authority and, consequently, can be ruled out as a significant carrier of general merchandise. The nine remaining carriers are: Byers Transport, Grimshaw Trucking, Mike's Trucking, Northern Industrial Carriers, Northwest Transport, Papps Truck Service, Tri-Line Express, Yukon Freightlines, Hay River Truck Lines Ltd., and Kapps Transport. In order to determine the relative importance of these companies in the N.W.T. transportation industry, the traffic recorded at the Enterprise Weight Scale was tabulated. This is presented in the following table:

TABLE 1

MOVEMENT OF GOODS
ENTERPRISE, N.W.T.

FIRM*	LOADS MOVED JUL-JAN 1977	%	LOADS MOVED 1978	%	LOADS MOVED JAN-JUN 1979	%
Byers	458	39.4	525	30	175	24.6
H.R.T.L.	185	15.9	377	21.5	208	29.3
Grimshaw	188	16.1	386	22	199	28
N.W. Transport	119	10.2	214	12.2	96	13.5
Tri-Line	41	3.4	83	4.7	27	3.8
N.I.C.	65	5.5	55	3.1	5	.7
Mikes	1	-	4	.2	0	0
Kapps	66	5.6	56	3.2	0	0
Papps	40	3.4	48	2.7	0	0
TOTALS	1168		1748		710	

* Firms rated from most to least significant in traffic past the Enterprise scale.

From Table 1 it can be seen that LTL goods are moved by various carriers, Byers being the largest followed by Hay River and then Grimshaw Trucking. From these ten carriers, five (5) belong to the Western Tariff Bureau;

Byers, Grimshaw, Northwest Transport, Tri-Line and Hay River Trucklines Ltd. These five account for approximately 95% of all LTL traffic over the two years that the figures were available for.

In order to more fully understand the N.W.T. trucking industry it is necessary to look at the costs involved in running a trucking operation. The following table outlines various costs of operating a five-axle tractor-trailer unit for moving dry freight (i.e. LTL, general merchandise)

TABLE 2

Operational Cost 5 Axle Tractor-Trailer Unit
For One Year Based on 100,000 Miles: *

ITEM	TOTAL COST	COST PER HOUR	% OF TOTAL COST	RANK
Driver	30,000	7.69	20.2	1
Fuel	20,694	5.43	13.76	2
Repairs	17,850	4.68	11.9	5
Cleaning	125	.03	-	12
Transport	3,000	.79	2	10
Tires	7,650	2.01	5.08	7
Depreciation	7,176	1.95	4.8	8
Licences	625	.17	.4	11
Trailer Cost Variable	20,393	5.35	13.6	3
Trailer Costs Fixed	3,440	.94	2.3	9
Insurance	4,512	1.18	3	8
Admin & Interest	19,551	5.15	13	4
Profit	15,040	3.97	10	6
TOTALS	150,396	39.33	100	

* Operating Costs of Trucks in Canada, 1978, Transport Canada, Surface.

The above cited table is derived from a Transport Canada Study and the figures should not be taken as totally accurate, rather they reflect general trends and orders of magnitude. It should be kept in mind that inter-territorial

traffic is probably more dependent upon Alberta costs rather than Territorial costs, and some weighting procedure would be needed to give a truer picture of the N.W.T. costs. On average the total costs appear to be 6-10% greater in the Northwest Territories that Alberta. One assumption that would tend to over-estimate the costs is that Transport Canada assumes the average trip to be 6.1 hours long or approximately 350 miles. A more realistic figure would have been 850 miles.

On a national basis the costs of operating a vehicle in the N.W.T. are not terribly onerous, as Table 3 outlines.

TABLE 3

	WAGES PER HOUR	DIESEL FUEL MARCH 1978	CAPITAL COST OF EQUIPMENT*	VEHICLE LICENCING 5 AXLE UNIT
B.C.	8.82	71.7	65,310	982
Alberta	8.02	52.5	62,500	1288
Sask.	7.80	74.3	65,735	1687
Manitoba	7.80	74.2	65,860	1907
Ontario	8.34	79.9	66,732	1512
Quebec	7.75	81.6	68,076	1236
Maritimes	5.61	80.0	67,650	956
Newfoundland	5.50	82.5	67,650	910
Yukon	8.72	80.3	65.310	810
N.W.T.	8.02	74.5	62,500	645

* For tractor unit and one freight trailer.

From this table it would be safe to conclude that on a national basis the costs of providing a motor transport service within the N.W.T. are mid-way of the national costs of providing such a service.

In comparing rates great care must be taken to ensure that apples are not compared to oranges. The costs incurred and consequently the rates charged will be determined by:

1) the road surface whetherit be gravel or paved. In general operation on gravel adds approximately 17.5% to the

total operating costs. Some operators have indicated that operation on gravel adds approximately 40% to the original operating costs. They report that vehicles depreciate more quickly on gravel, a fact ignored by Transport Canada in their study.

2) the type of equipment necessary to operate on gravel roads is more expensive.
(standard Kenworth type unit vs the lighter cheaper cab over unit).

3) the seasonality of the Territorial trucking industry adds costs to the operation.

4) the degree of back-haul is also critical to the rates charged.

The back haul may well be the predominant factor in determining the rates. In order to determine the amount of back-haul a spot survey was done of Hay River Trucklines, Grimshaw and Byers trucks heading south. From the weights of the trucks it was determined that approximately 50% of the capacity has been utilized. No records were kept as to the type of goods being moved. In addition, this survey was conducted in June and July of this year and these are two months which may not be an accurate indication of yearly back hauls. Some operators have indicated that these are the two prime months as both mine ore from Terra and fish are moving south. Consequently, these two months can not be applied to the other ten. The rates charged for back haul, in theory, are supposed to be tariff rates. The Board though is lead to understand that these rates may be whatever the market may bear, and presumably lower than the posted tariffs. Based on the following assumptions;

1) a 40,000 pound load consigned from one shipper.

2) a back haul of 10,000 pounds at the posted tariff rate, consigned from one shipper.

The revenue per running mile on a trip from Edmonton to Yellowknife return would be $1.52. This compares favourably with the Transport Canada figure of $1.23 of cost per mile based on early 1978 costs (approximately one year old).

If one chooses rates where the routing was predominantly over pavement, with assured back hauls (i.e. southern routes between populated centers) the per unit costs of transportation is lower than Edmonton - Yellowknife. On the other hand,if one chooses a routing over predominantly gravel to a small isolated community with an irregular, very limited back haul the per unit costs are higher. Example of the latter would be Edmonton - Watson Lake or Whitehorse - Inuvik and of the former Edmonton - Vancouver or Edmonton - Winnipeg.

If the rates being charged were exorbitant, the Board would expect that the financial position of the LTL carriers would reflect this. This is not the case. Of the four carriers in question, none showed exorbitant profits and,in fact,in some cases losses were evident for the last fiscal year.

The following table outlines the scheduled service available within the N.W.T. for LTL freight.

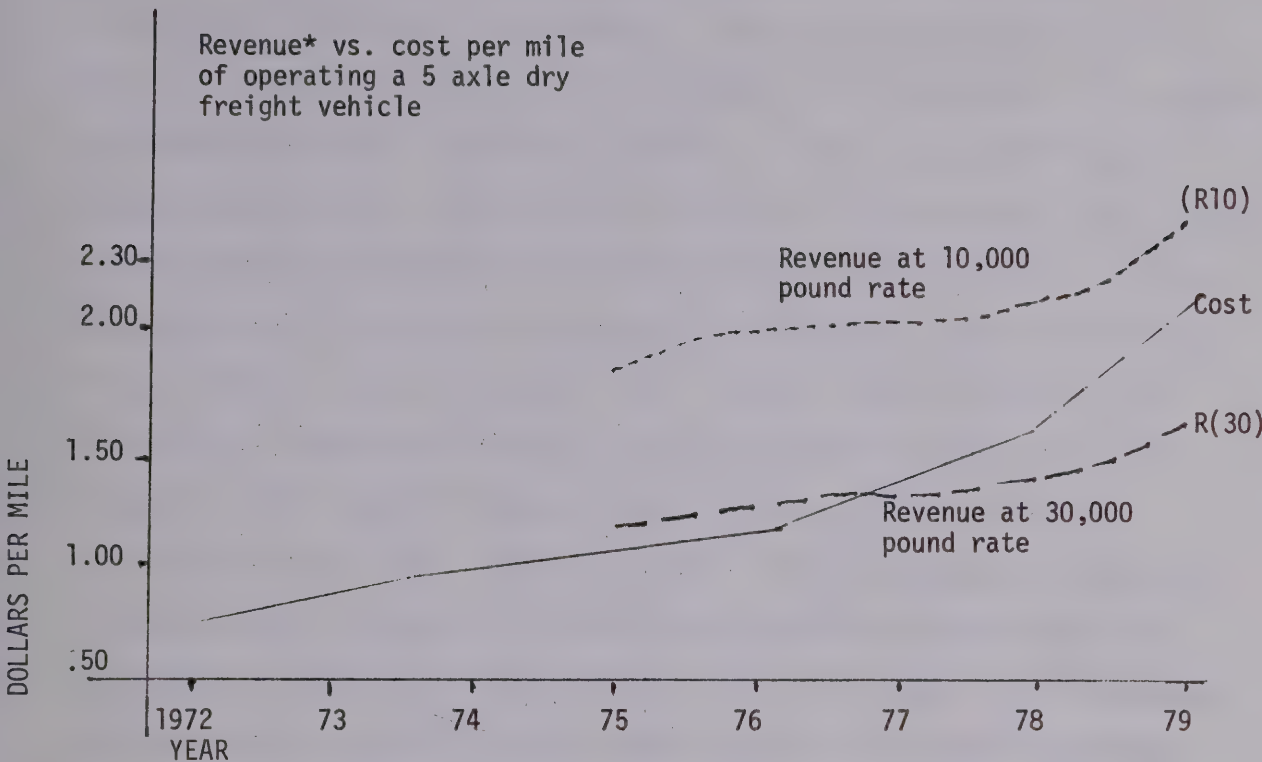
AREAS SERVICED	GRIMSHAW	BYERS	HAY RIVER TRUCK LINES	NORTHWEST TRANSPORT
Fort Smith	yes	yes	yes	-
Pine Point	-	yes	-	-
Hay River	yes	yes	yes	yes
Enterprise	-	yes	-	-
Fort Providence	-	yes	-	-
Rae-Edzo	-	yes	-	-
Yellowknife	yes	yes	yes	yes
Fort Simpson	-	yes	yes	-
FREQUENCY OF SERVICE				
Fort Smith	2/wk	3/wk	2/wk	-
Pine Point	-	2/wk	-	-
Hay River	daily	daily	2/wk	2/wk
Enterprise	-	daily	-	-
Fort Providence	-	3/wk	-	-

FREQUENCY OF SERVICE	GRIMSHAW	BYERS	HAY RIVER TRUCK LINES	NORTHWEST TRANSPORT
cont'd				
Rae-Edzo	-	1/wk	-	-
Yellowknife	2/wk	daily	2/wk	2/wk
Fort Simpson	-	3/wk	2/wk	-
OFFICES LOCATED IN				
Fort Smith	-	yes	yes	-
Pine Point	-	yes	-	-
Hay River	yes	yes	yes	yes
Enterprise	-	yes	-	-
Fort Providence	-	-	-	-
Rae-Edzo	-	-	-	-
Yellowknife	yes	yes	yes	yes
Fort Simpson	-	yes	yes	-
DELIVERY TERMS				
Deliver	yes	yes	yes	yes
Supposed to deliver	yes	yes	yes	yes
Extra charge	no	no	no*	no

DISCUSSION:

From the information presented the following observations emerge:

1. The only area where concern could be expressed about the rates charged or the degree of competition, is in the LTL general freight business within the N.W.T.
2. The LTL business is concentrated into three firms: (Byers, Hay River Trucklines, and Grimshaw) with two additional firms taking a small portion of the remaining traffic, (Tri-Line and Northwest Transport).
3. As all five of the above mentioned companies are members of the Western Tariff Bureau and given the method which the Western Tariff Bureau uses to set rates, the only conclusion available to the Board is that the tariffs are set by collusion and that a structure similar to a cartel exists.
4. Although prices have been fixed by collusion, none of the concerned firms appear to have profited unduly because of the established rates. The following graph shows a comparison of the movement of costs and revenue over the past few years. This graph further strengthens conclusions that no excess profit appears to have been made.
5. With the decline in the trucking industry over the past two years, it could well be that the industry is to an extent suffering from over capacity.



* It is assumed that the unit is hauling 40,000 pounds to Yellowknife and returning with 10,000 pounds, all at the posted rate. The trip is assumed to be 2000 miles in total.

With regard to the concentration of competiton for LTL business within the Western Tariff Bureau, it should be taken into account that several other firms (i.e. Canadian Lynden and Yukon Freightlines) have the authority and capacity to engage in the LTL, general freight business, but choose to do so in a minimal way.

If the five companies did not all belong to the Western Tariff Bureau, would the price be any different? This is a necessary question that needs an answer. The theory of oligopoly and real world experiences indicate that in all probability no substantial changes would be expected in the price

levels if a price leader mechanism had evolved instead of the tactic collusion of the Western Tariff Bureau. The regulatory environment within which the companies live must also be considered in this report. All companies are required to file a tariff with the Board. They are not permitted to charge any other price than that on file with the Board and any change in the tariff requires thirty days'notice to the Board. Given this type of environment what could its effect be on competition and rates? In all probability this environment tends to make the rates "sticky", that is they move infrequently. Perhaps most importantly in areas where economies could be given (i.e. back hauls or larger contract hauling), the companies are legally locked into their published tariffs. Unlike some jurisdictions that require filing, the N.W.T. does not require supporting documentation such as financial statements or cost profiles of specific items. In so far as the Board derives its authority from a federal action, the federal regulatory environment is also important. The Motor Vehicle Transport Act delegates authority to the Territorial Board, but also reserves the potential right to intervene in extra-territorial trucking should Provincial-Territorial regulations prove inhibitory to the flow of inter-jurisdictional traffic. To date no intervention has been considered. The Federal government also has a "Competitions Bill" which is put in place to protect the public from detrimental price fixing. Although there has been strong rumor that the Western Tariff Bureau and some of its members were being investigated for price fixing, no formal charges have yet been laid. Further it has been suggested that inter-jurisdictional trucking, because of the nature of its pricing structure would require exemption from competitions requirements of the federal laws, this though is only speculation and no formal indication of new policy has been given by the Federal government. It should also be borne in mind that if the Territorial Government enforced a rate approval

mechanism, the participating companies, would be exempt from any "competition law ".

Should the Territorial Government proceed to rate review and approval, what would be the minimum administrative and evaluative mechanism to enable a system to properly operate?

1. Timely filing of rates, at least three months prior to implementation so that approval could be given.
2. A means of public input and evaluation, so that there is public acceptance of the rates.
3. A standardized method of accounts and accounting procedures would have to be implemented by the concerned firms so that evaluation of rate proposals could be based on uniform information.
4. A method (probably computerized) would have to be derived to evaluate the impact of the proposed rate changes on the trucking industry.

   This would be a fairly complex model involving a great deal of detail of the structure of the trucking industry.

CONCLUSIONS:

Based on the analysis presented, the Board concludes that,although there is a pricing mechanism through collusion , removal of the Western Tariff Bureau as a cartel would not result in lower prices. In fact,price competition is not a feature of oligopoly as we know it today. The industry is presently suffering from under utilization, and this may in fact result in higher prices, although various companies within the industry are losing money. A rationalization whereby more business goes to fewer firms resulting in economics of scale and lower prices may benefit all consumers in the N.W.T. A rationalization as talked about is beyond the legislative mandate of the Board.

It would appear that the Territorial regulatory environment could be improved so that rates could be varied downward, but upward movement would still be subject to appropriate filing procedures. The establishment of a rate approval mechanism within the N.W.T. would be counter productive in that no need exists for it now andit would remove the participating companies from the scrutiny of federal competitions legislation. Further,a rate approval procedure would require additional administrative costs for the Government with no obvious benefits.

On the other hand,the present rate filing procedures are deficient, in that they do not require filing of justifications along with the required rate increase.

RECOMMENDATIONS:

1. The rate filing procedures of the N.W.T. Highway Transport Board should be amended to:
   a) allow the discounting of rates downward by all participating carriers.
   b) provide for a justification process with the filing for increased rates. This process would include a financial statement and an indication of the major areas of cost increases, such as labour, fuel, tires and interest costs.
   c) have a mechanism that, if needed, could be implemented to prevent unjustified rate increases. This would consist of a proposed set of regulations that could be implemented quickly if the need arose. These regulations would require rate approval on selective segments of the highway transport industry. The proposed rates would have to be justified in public and the Board would have the final say.
2. The Board, through annual filing requirements, establish a data bank to monitor the financial health of the N.W.T. trucking industry.
3. A means be evolved so that the public can be made aware of the reasons for the proposed rate increase, and thereby, could gain some understanding of the problems faced by the industry.

Submitted on behalf of the Highway Transport Board.

Gordon R. Carter

Gordon R. Carter, Chairman.